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_	ENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where appropriate, of the rele	evant passages	Relevant to daim No.	
X	KNOTT PATRICK G ET AL: "Airway inflammation driven by antigen-sp resident lung CD4+ T cells in alp cell receptor transgenic mice" AMERICAN JOURNAL OF RESPIRATORY A CRITICAL CARE MEDICINE, vol. 161, no. 4 part 1, April 2000 (2000-04), pages 1340-XP002269615 ISSN: 1073-449X the whole document	habeta-T ND	1-4,6,7	
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	C-(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT Category • Citation of document, with Indication, where appropriate, of the relevant passages Relevant to claim No.				
Category	Chausin of document, with indication, where appropriate, of the relevant passages	Helevant to claim No.			
	DIXON KATHLEEN FITZGERALD ET AL: "Use of D011.10 TcR Tg mice for analysis of an Lck inhibitor" FASEB JOURNAL, vol. 16, no. 4, 20 March 2002 (2002-03-20), page A316 XP009025641 Annual Meeting of the Professional Research Scientists on Experimental Biology; New Orleans, Louisiana, USA; April 20-24, 2002 ISSN: 0892-6638 the whole document	1-4,6,7			
X	MORE S H ET AL: "'Ignorance' of antigen-specific murine CD4+ and CD8+ T cells is overruled by lipopolysaccharide and leads to specific induction of IFN-gamma" SCANDINAVIAN JOURNAL OF IMMUNOLOGY, vol. 55, no. 4, April 2002 (2002-04), pages 329-335, XP001179345 ISSN: 0300-9475 the whole document	1-4,6,7			
X	MURPHY K M ET AL: "INDUCTION BY ANTIGEN OF INTRATHYMIC APOPTOSIS OF CD4 POSITIVE CD8 POSITIVE TCR-L-O THYMOCYTES IN-VIVO" SCIENCE (WASHINGTON D C), vol. 250, no. 4988, 1990, pages 1720-1723, XP001179156 ISSN: 0036-8075 cited in the application the whole document	1			
X	HOGQUIST K A ET AL: "T CELL RECEPTOR ANTAGONIST PEPTIDES INDUCE POSITIVE SELECTION" CELL, CELL PRESS, CAMBRIDGE, NA, US, vol. 76, no. 1, 14 January 1994 (1994-01-14), pages 17-27, XP000999394 ISSN: 0092-8674 cited in the application the whole document	1			
х	JANSSEN EDITH M ET AL: "Immunomodulatory effects of antigen-pulsed macrophages in a murine model of allergic asthma" AMERICAN JOURNAL OF RESPIRATORY CELL AND MOLECULAR BIOLOGY, vol. 27, no. 2, August 2002 (2002-08), pages 257-264, XP002269618 ISSN: 1044-1549 the whole document	1-4,6,7			